SHOUT
SHARE
IT

179-208 OK - RBS. 4/10/42.

#192 - 30th Ann. Rpt. 1918
#198 - 31/32 Ann. Rpts 1919/1920
#203 - 33d Ann. Rpt 1921
#208 - 34th Ann. Rpt. 1922

OK - RBS
4/10/42

SAPIENTIA UNIVERSALIS EX LIBRIS
UNIVERSITY OF NEW HAMPSHIRE

EXPERIMENT STATION LIBRARY

CLASS ~~639.73~~
NUMBER ~~N53 179-208~~
ACCESSION 4798 ~~c.3~~

INSPECTION OF COMMERCIAL FEEDING STUFFS

ANALYSES OF COMMERCIAL FEEDING-STUFFS COLLECTED BY THE COMMISSIONER OF AGRICULTURE IN 1921.

According to the federal census the consumers of New Hampshire purchased about ten million dollars worth of commercial feeding-stuffs in 1919. The value of these materials is largely determined by their chemical analysis. No manufacturing company would purchase a large supply of material the value of which depended on a chemical analysis without having the material inspected. It would be impracticable for each of the thousands of consumers to maintain a laboratory to test the feeds which they purchased. For this reason the state maintains an inspection service which aims to protect the consumers against the possible adulteration and misbranding of these materials. In order that the inspection service may be most effective the consumers must make use of it. This bulletin is a report of the inspection of feeding-stuffs for the year 1921 made under the direction of the Commissioner of Agriculture, Mr. Andrew L. Felker.

DO NOT THROW IT AWAY! READ IT! USE IT WHEN YOU PURCHASE FEEDS.

Mr. E. D. Sanborn, State Inspector, visited most of the feed warehouses in the state and collected 246 samples of feeds.

With a few exceptions the feeds were of good quality and similar to those of last year. The cottonseed meals, although they showed a larger number of deficiencies in guarantees, had a higher average analysis and quality than last year. There were a larger number of poultry feeds and they showed a greater percentage of deficiencies than last year. The flaxseed meals were inferior in quality and showed more deficiencies than last year.

CO-OPERATION WITH THE FEDERAL BUREAU OF CHEMISTRY.

The co-operative arrangement begun in 1919 with the Federal Bureau of Chemistry was carried out again the past year. In the cases where inter-state shipments were found to be misbranded or adulterated the findings of the state department were reported to the federal authorities. Nine samples were reported to the Federal Bureau of Chemistry during the past year. This co-operation gives a great deal of additional protection to the feed purchasers of the state.

SLIDING SCALE OR DOUBLE GUARANTEE

The law definitely provides that the manufacturer shall state only the minimum percentage of protein, fat and carbohydrates upon the guarantee. The object of this is to prevent the purchaser from being misled by a double guarantee. For example, without this provision in the law, when a guarantee shows 30 per cent to 45 per cent protein, an analysis of 30 per cent is all that is necessary to meet the guarantee, although the guarantee may lead the purchaser to believe that he may get close to 45 per cent, when as a matter of fact he is more apt to get 30 per cent, or even less. The last year has shown some improvement in this regard. In 1920, out of 340 samples analyzed, 21 or 6 per cent, had a double guarantee while in 1921 out of 246 samples only 10, or 4 per cent, had a double guarantee. These cases were brought to the attention of the manufacturers and they have promised to comply with the law in the future.

CLASSIFICATION OF FEEDING-STUFFS ANALYZED

In classifying these feeding-stuffs we have used the class name under which they have been sold. The following table shows the number of feeds in each class, the average per cent of protein and fat found and the price per 100 lbs.

TABLE NUMBER 1.

Class	No. of Feeds	Average Percent. Protein	Average Percent. Fat	Average Price Per 100 lbs.
Beet Pulps	3	8.29	0.71	2.72
Calf Meals	3	26.15	4.40	3.88
Compounded Feeds	31	11.37	3.94	2.57
Cottonseed Meals	14	37.79	6.60	2.62
Dairy Feeds	36	22.06	5.00	3.07
Flaxseed Meals	6	31.45	6.08	2.87
Gluten Feeds	5	28.68	2.38	3.58
Hog Feeds	3	18.49	4.85	3.08
Hominy Feeds	7	10.38	6.67	2.42
Horse Feeds	2	10.02	2.85	2.50
Miscellaneous Feeds	6	15.43	4.21	2.66
Poultry Feeds	36	26.60	6.74	4.22
Wheat Feeds	94	16.37	4.64	2.65
Total	246			

DEFICIENCIES IN ANALYSIS

The following table shows the number of samples found deficient in protein and in fat, and the number of samples deficient in both protein and fat, and also the percentage number of each class showing deficiencies. In making up the table, only those deficiencies of one half of one per cent or more of protein and one fourth of one per cent or more of fat were used.

TABLE NUMBER 2.

Class	No. in Class	No. Def. ½% Protein	No. Def. ¼% Fat	No. Def. both Protein and Fat	% Def. ½% Protein	% Def. ¼% Fat	% Def. both Protein and Fat
Beet Pulps	3	1	0	0	33	0	0
Calf Meals	3	0	0	0	0	0	0
Compounded Feeds	31	3	11	2	10	33	6
Cottonseed Meals	14	3	0	0	21	0	0
Dairy Feeds	36	5	7	2	14	19	6
Flaxseed Meals	6	4	1	1	67	17	17
Gluten Feeds	5	0	0	0	0	0	0
Hog Feeds	3	2	2	2	67	67	67
Hominy Feeds	7	0	3	0	0	43	0
Horse Feeds	2	1	0	0	50	0	0
Miscellaneous Feeds	6	2	3	2	33	50	33
Poultry Feeds	36	9	5	3	25	14	8
Wheat Feeds	94	3	4	1	3	4	1
Total	246	33	36	13	13.4	14.6	5.3

WHAT DOES THE CHEMICAL ANALYSIS MEAN?

In a feed analysis the following determinations are usually made: protein, fat, carbohydrates, ash, moisture and crude fiber.

Protein is determined by finding the percentage of total nitrogen and multiplying this by the factor 6.25, since it has been found that the average proteins contain 16 per cent nitrogen. While this includes small amounts of certain other compounds which contain nitrogen, for all practical purposes it is sufficiently accurate. Protein, then, is made up of the compounds in the feed which contain nitrogen.

Fat is determined by extracting a dried sample of the feedstuff with ether and weighing the residue after the ether is driven off. In main it contains the vegetable fats of which olive oil, linseed oil, peanut oil, and cottonseed oil are examples. It contains also small amounts of chlorophyll (the green coloring matter of leaves), waxes, resins, etc.; but for practical purposes it is accurate enough to deal with it as fat.

Ash is determined by weighing the residue after the feedstuff has been burned at a low temperature. It contains the mineral matter of feedstuffs.

Moisture is determined by finding the loss in weight after heating at the temperature of boiling water. It shows the amount of water that the feed contains.

Carbohydrates are determined by adding the percentage of protein, fat, moisture, and ash and subtracting it from 100. The carbohydrates are composed largely of starches, sugars, pentosans, celluloses, etc. The carbohydrates include the crude fiber also. The percentage of carbohydrates less the percentage of crude fibre is called *nitrogen free extract.*

Crude Fibre is made up of the more woody-like carbohydrates, which are largely of cellulose nature. Pure cotton is an example of almost pure cellulose. Wood, straw, corn fodder, etc., are materials which are high in crude fiber content.

WHAT ARE FOODS FOR ANIMALS?

In order that an animal may continue to live even without making growth or producing wool, eggs, milk, or work, etc., there are certain food materials which it must have. The animal must have a certain amount of protein, fat, carbohydrates, water and mineral constituents. In addition there are other things, known as "vitamines," "growth promoting substances," or "food accessories," the chemical nature of which is not well understood, which

are necessary. The latter substances, however, are usually present in sufficient quantites in our regular feeding-stuffs and we need consider them no further. Our feeding stuffs usually contain mineral matter sufficient for the needs of an animal with a few exceptions, such as calcium carbonate, which we furnish, as oyster shells for hens, so we need not consider the mineral matter further.

The protein, fat and carbohydrates must be furnished in the feed and it is their content which largely determines the value of the feed.

DIGESTIBILITY IMPORTANT IN DETERMINING THE VALUE OF FEED.

Not all of the protein, carbohydrates and fat in the different feedstuffs are digested. In comparing the value of different feedstuffs, especially when they are of different types, we must take into consideration the digestibility of these food nutrients. The *coefficient of digestibility* is a term which expresses the percentage amount of the food nutrients which are digested and absorbed by the animal. These coefficients are determined by careful feeding experiments which are conducted by the various experiment stations. Table number 3 gives a summary of the average results for some of our common feedstuffs.

TABLE NUMBER 3.

AVERAGE DIGESTIBILITY OF FEEDING STUFFS, WITH RUMINANTS EXPRESSED IN PERCENTAGE
(Taken from "Feeds and Feeding" by Henry and Morrison.)

	Dry matter	Protein	Crude fiber	Nitrogen free Extract	Fat
Corn Meal	90	74	57	94	93
Gluten meal	88	85	55	90	93
Gluten feed	86	85	76	88	85
Hominy feed	83	66	76	90	91
Wheat bran	65	78	31	72	68
Standard wheat middlings		77	30	78	88
Barley	88	78	56	92	78
Oats	70	78	35	81	87
Buckwheat	71	75	24	76	100
Soybean meal		92	99	100	68
Linseed meal (old process)	79	89	57	78	89
Linseed meal (new process)	81	86	73	87	95
Cottonseed	66	68	76	50	87
Cottonseed meal	77	84	37	75	95
Cottonseed feed	56	58	45	61	90
Dried brewer's grain	61	81	49	57	89
Dried beet pulp	75	52	83	83	....
Molasses feeds	68	61	50	79	100
Flesh meal	....	93	....	....	98
Fish meal	71	78	....	....	100
Timothy hay	55	48	50	62	50
Barley hay	59	65	62	63	41
Oat hay	54	54	52	56	61
Alfalfa	60	71	43	72	38
Red clover	59	59	54	66	57
Corn silage dent inmature	64	53	68	66	71
Corn silage dent mature	66	51	65	71	82

We have this data for the pure grains and feeds, but because the various proprietary feeds are not standardized there are no data available for them. For this reason there is a decided advantage in purchasing the pure grains, although it must be said that there are a number of reliable firms placing good compounded feeds upon the market.

HOW TO USE TABLE NO. 3.

Only the digestible nutrients are of value and so in comparing two feeds we should compare just the digestible nutrients. Suppose we had a cottonseed meal which analyzed 38 per cent protein. The table shows cottonseed meal protein to be 84 per cent digestible. We then would have 84-100 of 38 lbs., or 31.9 lbs of digestible protein per 100 lbs. If a wheat bran analyzed 15 per cent protein, we see from the table that it is 78 per cent digestible and we would have 78-100 of 15 or 11.7 lbs. of digestible protein. The cottonseed meal would then have 31.9 lbs. compared with 11.7 in wheat bran.

HOW TO FIGURE THE COMPARATIVE VALUE OF FEEDS FROM THE CHEMICAL ANALYSIS.

Because such factors as palatability, digestibility, etc., play an important part in determining the value of feedstuffs it is difficult to make an exact comparison in their value from a chemical analysis. The analysis will, however, serve as a very valuable guide. Since the farmer can usually raise carbohydrates cheaper than he can purchase them he is chiefly interested in buying the concentrated feedstuffs for their protein and fat content.

Feeds may be compared upon the basis of the number of pounds of protein and fat which one dollar will buy. An example is as follows: Feed number 118 sells for $3.50 and is guaranteed protein 12.00 per cent, fat 4.00 per cent. If it contains 12.00 per cent protein there are 12 lbs. of protein in 100 lbs. of feed costing $3.50. Then one dollar buys 12 divided by 3.50 or 3.4 lbs. of

protein and 4.00 divided by 3.50 or 1.1 lbs. of fat. Feed number 240 sells for $2.75 and is guaranteed 25.00 per cent protein and 6.00 per cent fat. Then one dollar buys 25 divided by 2.75 or 9.1 lbs. of protein and 6 divided by 2.75 or 2.2 lbs. of fat.

In other words, in feed number 240 the consumer receives nearly three times as much protein and twice as much fat per dollar as in feed number 118. These figures represent two feeds of the same type which were sold in New Hampshire in 1921. In comparing feeds of the same class this method shows fairly accurately their relative value. When feeds of different types, like a cottonseed and a hominy feed, are compared, the digestible protein figures should be compared and the carbohydrates must also be taken into consideration.

Table Number 4 shows the average number of pounds of protien and fat one dollar would buy for all of the feedstuffs analyzed in 1921.

TABLE NUMBER 4.

Class	No. of lbs. of Protein $1.00 will buy	No. of lbs. of Fat $1.00 will buy
Beet Pulp	3.5	0.3
Calf Meal	6.7	1.2
Compounded Feeds	4.4	1.5
Cottonseed Meals	14.4	2.5
Dairy Feeds	7.2	1.6
Flaxseed Meals	10.9	2.1
Gluten Feeds	8.0	0.7
Hog Feeds	6.0	1.6
Hominy Feeds	4.3	2.7
Horse Feeds	4.0	1.1
Miscellaneous Feeds	5.8	1.6
Poultry Feeds	6.3	1.5
Wheat Feeds	6.2	1.8

An inspection of this table will show the importance of buying your feeds according to their analysis. *Buy your feeds intelligently.*

DEFINITION OF FEEDING-STUFFS

The department is frequently asked for the definition of different feeding-stuffs. To meet this demand we are including here the definitions of some of the most important feeding-stuffs used in this state. The definitions as given are those adopted by the Association of Feed Control Officials of the United States.

1. *Meal* is the clean, sound, ground product of the entire grain, cereal or seed which it purports to represent.

2. *Chop* is a ground or chopped feed composed of one or more different cereals or by-products thereof. If it bears a name descriptive of the kind of cereals, it must be made exclusively of the entire grains of those cereals.

3. *Alfalfa* meal is the entire alfalfa hay ground, and does not contain an admixture of ground alfalfa or other foreign materials.

4. *Blood meal* is ground dried blood.

5. *Meat Scrap* and *Meat Meal* are the ground residue from animal tissues exclusive of hoof or horn. If they contain more than 10 per cent of phosphoric acid (P_2O_5) they must be designated *Meat and Bone Scrap* and *Meat and Bone Meal.* If they bear a name descriptive of their kind, composition or origin, they must correspond thereto.

6. *Corn Bran* is the outer coating of the corn kernel.

7. *Corn Feed Meal* is the by-product obtained in the manufacture of cracked corn, with or without aspiration products added to the siftings, and is also the by-product obtained in the manufacture of table meal from the whole grain by the non-degerminating process.

8. *Corn Germ Meal* is a product in the manufacture of starch, glucose and other corn products, and is the germ layer from which part of the corn oil has been extracted.

9. *Grits* are the hard, flinty portions of Indian corn, without hulls and germs.

10. *Corn Gluten Meal* is that portion of commercial shelled corn that remains after the separation of the larger part of the starch, the germ and the bran, by the processes employed in the manufacture of corn starch and glucose. It may or may not contain corn solubles.

11. *Corn Gluten Feed* is that portion of commercial shelled corn that remains after the separation of the larger part of the starch and the germs by the processes employed in the manufacture of cornstarch and glucose. It may or may not contain corn solubles.

12. *Hominy Feed, Hominy Meal or Hominy Chop* is the kiln dried mixture of the mill run bran coating, the mill run germ, with or without a partial extraction of the oil and a part of the starchy portion of the white corn kernel obtained in the manufacture of hominy, hominy grits and corn meal by the degerminating process.

13. *Yellow Hominy Feed, Yellow Hominy Meal* or *Yellow Hominy Chop* is a kiln-dried mixture of the mill-run bran coating, the mill run germ, with or without a partial extraction of the oil and a part of the starchy portion of the yellow corn kernel obtained in the manufacture of yellow hominy grits and yellow corn meal by the degerminating process.

14. *Cottonseed Meal* is a product of the cottonseed only, composed principally of the kernel with such portion of the hull as is necessary in the manufacture of oil; provided that nothing shall be recognized as cottonseed meal that does not contain at least 36 per cent of protein.

15. *Good Cottonseed Meal* must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color, and must contain at least 36 per cent of protein.

16. *Cottonseed Feed* is a mixture of cottonseed meal and cottonseed hulls, containing less than 36 per cent of protein.

17. *Linseed Meal* is the ground product obtained after extraction of part of the oil from ground flaxseed screened and cleaned of weed seeds and other foreign materials by the most improved commercial processes, provided that the final product shall not contain over six per cent of weed seeds and other foreign materials and provided further that no portion of the stated six per cent of weed seeds and other foreign materials shall be deliberately added.

18. *Oil Meal* is the ground product obtained after the extraction of part of the oil by crushing, cooking and hydraulic pressure, or by crushing, heating and the use of solvents from seeds which have been screened and cleaned of weed seeds and other foreign materials by the most improved commercial processes. When used alone the term "Oil Meal" shall be understood to designate linseed meal as defined. When used to cover any other product the name of the seed from which it is obtained shall be prefixed to the words "oil meal."

19. *Old Process Oil Meal* is the ground product obtained after the extraction of part of the oil by crushing, cooking and hydraulic pressure from seeds screened and cleaned of weed seeds and other foreign materials by the most improved commercial processes. When used alone the term "Old Process Oil Meal" shall be understood to designate linseed meal as defined, made by the old process. When used to cover any other product the name of the seed from which it is obtained shall be prefixed to "old process oil meal."

20. *New Process Oil Meal* is the ground product obtained after the extraction of part of the oil by crushing, heating and the use of solvents from seeds screened and cleaned of weed seeds and other foreign materials by the most improved commercial pro-

cesses. When used alone the terms "New Process Oil Meal" shall be understood to designate linseed meal as defined, made by the new process. When used to cover any other product the name of the seed from which it is obtained shall be prefixed to "new process oil meal."

21. *Wheat Bran* is the coarse outer coating of the wheat kernel as separated from cleaned and scoured wheat in the usual process of commercial milling.

22. *Standard Middlings* (Red Shorts or Brown Shorts) consists mostly of the fine particles of bran, germ and very little of the fibrous offal obtained form the "tail of the mill." This product must be obtained in the usual commercial process of milling.

23. *Gray Shorts* (Gray Middlings or Total Shorts) consists of the fine particles of the outer bran, the inner or "bee-wing" bran, the germ, and the offal or fibrous material obtained in the usual commercial process of flour milling.

24. *Flour Middlings* shall consist of standard middlings and red dog flour combined in the proportions obtained in the usual process of milling.

25. *White Shorts or White Middlings* consist of a small portion of the fine bran particles and the germ and a large portion of the fibrous offal obtained from the "tail of the mill." This product must be obtained in the usual process of flour milling.

26. *Red Dog Flour* consists of a mixture of low-grade flour, fine particles of bran and the fibrous offal from the "tail of the mill."

27. *Wheat Mixed Feed* (Mill Run Wheat Feed) consists of pure wheat bran and the gray or total shorts or flour middlings combined in the proportions obtained in the usual process of commercial milling.

28. *Wheat Bran and Standard Middlings* consists of the two commodities as defined above mixed in the proportions obtained in the usual process of commercial milling.

29. *Screenings* consists of the smaller imperfect grains, weed seeds and other foreign materials having feeding value, separated in cleaning the grain.

30. *Scourings* consists of such portions of the cuticle, brush, white caps, dust, smut and other materials as are separated from the grain in the usual commercial process of scouring.

31. (NOTE)—If to any of the wheat by-product feeds there should be added screenings or scourings, as as defined, either ground or unground, bolted or unbolted, such bran shall be so registered, labeled and sold as clearly to indicate this fact. The word "Screenings" or "Scourings" as the case may be, shall appear as a part of the name or brand and shall be printed in the same size and face of type as the remainder of the brand name. When the word "Screenings" appears it is not necessary to show also on the labeling the word "Scourings."

PROPOSED STANDARDS FOR WHEAT MILL FEEDS.

	Protein (Min).	Fat (Min.)	Fiber (Max.)
Standard middlings	16.0%	4.5%	9.0%
Flour middlings	15.0	3.0	6.0
Red dog flour	16.0	4.5	4.0
Brown shorts	15.5	3.5	6.5
Gray shorts	16.0	3.5	5.5
White shorts	14.5	3.0	3.5
Wheat mixed feed	15.5	3.5	8.5

ANALYSES OF COMMERCIAL FEEDING STUFFS

Brand and name and address of manufacturer	Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
	Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
BEET PULPS							
Dried Beet Pulp	G. 9.00	0.50	.....	.....	.....	18.00	
Kasco Mills, Inc.	F. 7.45	0.69	79.03	3.40	9.43	18.15	
Toledo, Ohio							
Dried Beet Pulp	G. 8.00	0.50	.....	.....	.....	20.00	Residue of sugar beets dried after extraction of sugar.
Larrowe Milling Co.	F. 9.19	0.56	79.79	3.90	6.56	.....	
Detroit, Mich.							
Dried Beet Pulp	G. 8.00	0.50	50.00	.....	.....	20.00	Residue of sugar beets dried after extracting sugar.
Charles Pope	F. 8.23	0.87	76.80	4.37	9.73	.....	
Riversdale, Ill.							
CALF MEALS							
Blatchford's Calf Meal	G. 24.00	5.00	53.00	.....	.....	6.75	Locust bean meal, unpressed flaxseed, wheat flour, blood flour, barley and malt sprout meal, ground beans and peas, rice polish, old process oil meal, cocoa shell meal, cocoanut meal, recleaned cottonseed meal, fenugreek, dried milk, anise and salt.
Blatchford Calf Meal Co.,	F. 26.01	5.00	52.97	5.46	10.56	6.75	
Waukegan, Ill.							
International Calf Meal	G. 25.00	5.00	46.00	.....	.....	10.00	Cocoanut meal, wheat flour, blood meal, old process linseed oil meal, ground and bolted screenings from wheat, locust bean, fenugreek, anise, salt.
International Sugar Feed Co.,	F. 25.39	5.00	50.33	7.87	11.41	8.21	
Minneapolis, Minn.							
Purina Calf Chow Feed	G. 27.00	3.20	48.00	.....	.....	3.50	Blood flour, linseed meal, hominy feed, wheat flour and corn feed meal.
Purina Mills	F. 27.06	3.20	54.51	3.65	11.58	3.50	
St. Louis, Mo.							
COMPOUNDED FEEDS							
Portage Stock Feed	G. 8.50	4.00	.....	.....	.....	10.00	White or yellow shelled corn, barley, oat shorts, oat hulls, oat middlings, wheat middlings and ½ of 1% salt.
Akron Feed & Milling Co.	F. 7.06	2.79	76.58	3.46	10.11	11.21	
Akron, Ohio.							

Armour's Stock Feed	G.	12.00	4.00	60.00	.....	.....	12.00	Ground corn, hominy feed, wheat middlings, ground barley, oat meal mill by-products, oat shorts, oat middlings, oat hulls, cottonseed meal, corn oil meal ½ of 1% salt.
Armour Grain Co.	F.	15.32	3.60	66.31	5.01	9.76	11.96	
Chicago, Ill.								
Pennant Brand Stock Feed	G.	9.00	5.00	60.00	.....	.....	12.00	Fine white hominy and oat by-products, oat middlings, oat hulls, and oat shorts.
E. W. Bailey & Co.	F.	8.84	4.61	74.59	3.48	3.48	13.04	
Swanton, Vt.								
Iroquois Stock Feed	G.	10.00	4.00	65.00	.....	.....	13.00	Corn feed meal, ground oats, ground barley, corn gluten feed, hominy meal, oat shorts, oat hulls, wheat bran and wheat middlings containing mill run of screening aud ½ of 1% salt.
Buffalo Cereal Co.	F.	10.51	4.00	71.97	4.63	8.89	12.31	
Buffalo, N. Y.								
Cowee's Stock Feed	G.	9.00	4.00	45.00	.....	.....	10.00	Ground oats, hominy feed, barley, and oat meal mill by-products, oat middlings, oat shorts, oat hulls, ½ of 1% salt.
E. A. Cowee Co.	F.	9.45	4.51	73.17	4.04	8.83	11.40	
Worcester, Mass.								
Crosby's Stock Feed	G.	9.00	4.00	60.00	.....	.....	10.00	Ground barley, ground hominy feed, ground oats, oat feed, oat hulls, oat shorts, oat middlings.
E. Crosby & Co.	F.	16.78	4.91	61.97	5.19	11.15	8.18	
Brattleboro, Vt.								
Medal Stock Feed	G.	10.00	3.25	62.00	.....	.....	11.00	Ground corn, hominy feed, yellow hominy feed, linseed oil meal, ground barley, wheat bran and wheat middlings, cotton seed meal, oatmeal mill by product, oat middlings, oat hulls, oat shorts, ground puffed rice, ground puffed wheat, calcium phosphate, ½ of 1% salt.
J. Cushing Co.	F.	10.48	2.59	71.38	5.66	9.89	12.63	
Fitchburg, Mass.								
Quality Stock Feed	G.	9.00	6.00	61.00	.....	.....	9.00	Ground oats, corn meal, hominy feed meal, oat shorts, oat hulls and salt.
J. Cushing Co.	F.	9.71	6.62	72.71	3.57	7.39	9.00	
Fitchburg, Mass.								
John W. Eshelman & Sons	G.	10.00	3.00	.....	.....	.....	10.00	Cottonseed meal, wheat middlings, ground grain screenings, oat meal by products, oat hulls, oat shorts, oat middlings, corn feed meal and hominy feed.
Eshelman's Stock Feed	F.	10.07	3.66	73.69	3.87	8.71	9.83	
Lancaster, Pa.								
Diamond A Stock Feed	G.	8.00	4.00	60.00	.....	.....	9.50	Hominy meal or corn meal, 2nd class flour, ground barley, rice meal, ground oats, oatmeal by products, oat middlings, oat shorts, oat hulls, ½ of 1% salt.
Foster Grain Co.	F.	9.20	4.41	73.33	3.68	9.38	9.50	
Lowell, Mass.								
Grandin's Stock Feed	G.	10.00	4.00	55.00	.....	.....	14.00	Ground corn, ground oats, ground barley, hominy feed, wheat middlings, oatmeal, oat middlings, oat hulls, oat shorts, and a small per centage of salt.
D. H. Grandin Milling Co.	F.	8.49	4.00	72.11	3.11	11.99	7.36	
Jamestown, N. Y.								

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Homestead Stock Feed	G.	10.00	3.25	.....	.....	.....	12.00	Whole ground corn, oats, barley, kafir, wheat middlings, oat meal, oat hulls, oat middlings and oat flour.
Illinois Feed & Elevator Co.	F.	10.15	3.30	73.08	2.11	11.36	14.18	
Bloomington, Ill.								
Stock Feed	G.	12.00	3.00	60.00	.....	.....	12.00	
McQuesten & Lewis	F.	13.17	3.82	67.22	3.62	12.17	10.35	
Manchester, N. H.								
Old Honesty Stock Feed	G.	10.00	3.00	.....	.....	.....	12.00	Hominy feed, corn meal, oat hulls, oat shorts, oat middlings, oil meal, cottonseed meal, wheat bran and salt, ground barley and oats.
Oswego Milling Co.	F.	10.55	3.86	71.86	4.79	8.94	10.65	
Oswego, N. Y.								
Uncle John's Hog Feed	G.	18.00	6.00	30.00*	.....	.....	13.00	Cocoa oil meal, bean meal, peanut oil meal, alfalfa hominy feed, corn feed, old process oil meal, oat hulls, oat shorts, oat middlings, fish, meat, bone, wheat middlings, ground barley and small quantity of salt, calcium carbonate and rice bran.
Oswego Milling Co.	F.	21.39	6.30	51.92	10.93	9.46	9.84	
Oswego, N. Y.								
Go-Tu-It Hog Ration	G.	15.00	6.00	30.00	.....	.....	13.00	Cocoanut oil meal, velvet bean meal, peanut oil meal, rice bran, old process linseed oil meal, alfalfa meal, hominy meal, oat hulls, oat middlings, oat shorts, ground barley, fish, meat, bone meal, corn germ meal, wheat middlings, salt and calcium carbonate.
Park & Pollard Co.	F.	17.51	6.00	55.22	11.79	9.48	12.85	
Boston, Mass.								
Stock Feed	G.	9.00	4.00	50.00	.....	.....	12.00	Ground corn, hominy feed, oat hulls, oat middlings, oat shorts, old process linseed meal, calcium carbonate and salt.
Park & Pollard Co.	F.	9.10	2.88	74.37	5.18	8.47	13.86	
Boston, Mass.								
Iowa Stock Feed	G.	10.00	4.00	.....	.....	.....	12.70	Wheat middlings, corn meal, hominy feed, brewer's dried grains, corn gluten, oatmeal mill by products, oat shorts, oat hulls, oat middlings and 1% of table salt.
Purity Oats Co.	F.	10.59	4.30	72.27	4.89	7.95	11.90	
Davenport, Iowa.								

Purina Steer Fatena Feed Purina Mills St. Louis, Mo.	G. F.	12.00 11.47	1.80 0.85	60.00 61.13	..... 8.60	..... 17.95	10.00 12.56	Molasses, cottonseed meal, ground corn, ground alfalfa, wheat bran, charcoal made from humus, and 1% salt.
Schumacker Feed The Quaker Oats Co. Chicago, Ill.	G. F.	10.00 11.43	3.25 3.49	62.00 71.10	..... 5.47	..... 8.51	11.00 10.61	Ground corn, hominy feed, yellow hominy feed, ground barley, ground puffed wheat, ground puffed rice, wheat bran and wheat middlings with ground screenings not exceeding mill run, linseed oil meal, cottonseed meal, oatmeal mill by product, oat middlings, oat hulls, oat shorts, calcium carbonate, ½ of 1% salt.
White Diamond Feed The Quaker Oats Co. Chicago, Ill.	G. F.	8.00 8.05	3.25 2.80	62.00 72.51	..... 6.52	..... 10.12	9.00 9.00	Ground corn, hominy feed, corn feed meal by products from manufacturer of hominy and corn meal, by products from degerminator process with partial extraction of oil, oatmeal mill by product, oat middlings, oat hulls, oat shorts and ½ of 1% salt.
White Diamond Stock Feed The Quaker Oats Co. Chicago, Ill.	G. F.	8.00 8.58	3.25 2.71	62.00 74.83	..... 3.50	..... 10.38	9.00 8.67	Ground corn, hominy feed, corn feed meal, from degerminator process with partial extraction of oil, oatmeal mill by products, oat middlings, oat hulls, oat shorts, and ½ of 1% salt.
Purina O-Moline Feed Ralston Purina Co. St. Louis, Mo.	G. F.	9.70 9.91	3.20 4.31	67.00 70.70	..... 4.05	..... 11.03	8.00 8.68	Cracked corn, oats, ground alfalfa, molasses and 1% salt.
New Hampshire Pig Ration Rockingham County Farmer's Association Exeter, N. H.	G F.	15.00 16.23	3.00 4.61	49.00 62.62	..... 5.71	..... 10.83	7.00 7.00	Ground fancy oats, (optional corn meal or hominy) flour middlings, high grade meat scraps.
Haskell's Stock Feed Sheets Elevator Co. Toledo, Ohio.	G. F.	9.00 9.85	6.00 6.00	61.00 74.47	..... 3.31	..... 6.37	9.00 9.00	Ground corn, ground oats, hominy feed, oat rulls, oat shorts and salt.
Syragold Stock Feed Syarcuse Milling Co. Syracuse, N. Y.	G. F.	9.00 9.48	3.00 2.66	55.00 74.28	..... 5.54	..... 8.04	12.00 11.90	Ground corn, oats and barley, hominy feed, linseed meal, oat middlinga, oats shorts, oat hulls and salt.
Welden Feed St. Albans Grain Co. St. Albans, Vt.	G. F.	12.00 12.76	3.25 3.25	60.00 68.72	..... 3.16	..... 12.11	6.00 6.00	Wheat bran, wheat middlings, not exceeding mill run of screenings, red dog flour and white corn flour.

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Wirthmore Pig Feed	G.	18.00	5.00	50.00	.....	.....	14.00	Tankage, edible bone meal, wheat middlings, wheat bran not exceeding mill run of screenings, linseed meal, peanut feed, ground alfalfa, ground hominy, corn meal and about ½ of 1% salt.
St. Albans Grain Co. St. Albans, Vt.	F.	19.35	5.00	54.91	11.29	9.45	13.29	
Charlestock Feed	G.	9.00	4.50	50.00	.....	.....	15.00	Oat feed, oatmeal mill by products, oat shorts, oat middlings, oat hulls, hominy or corn meal, linseed meal and ½ of 1% salt.
St. Albans Grain Co. St. Albans, Vt.	F.	9.80	3.54	72.99	4.65	9.02	13.84	
Wirthmore Stock Feed	G.	9.00	4.00	60.00	.....	.....	9.50	Ground barley, ground oats, ground hominy meal, ground corn, oat meal mill by products, oat middlings, oat shorts, oat hulls, ½ of 1% salt.
St. Albans Grain Co. St. Albans, Vt.	F.	9.52	4.71	72.43	4.09	9.25	9.50	
Stratton & Co's. Stock Feed	G.	7.50	2.83	66.00	3.70	9.60	14.43	Cereal by products, reground oat feed, oat middlings and shorts, corn bran, corn mill by products, corn siftings best fine yellow corn meal.
Stratton & Co. Concord, N. H.	F.	7.56	2.18	76.11	3.55	10.60	13.94	
COTTONSEED MEALS								
ACO Brand Cottonseed Meal	G.	41.18	7.00	26.00	.....	.....	10.00	
American Cotton Oil Co. Memphis, Tenn.	F.	43.75	8.03	34.97	6.01	7.24	.....	
Surety Brand Cottonseed Meal	G.	36.00	5.50	27.00	.....	.....	14.00	
American Cotton Oil Co. Memphis, Tenn.	F.	34.93	6.57	44.47	6.17	7.86	.....	
Paramount Brand Good Cottonseed Meal	G.	36.00	5.50	27.00	.....	.....	14.00	Upland cotton seed.
Ashcraft-Wilkinson Co. Atlanta, Ga.	F.	36.00	5.97	44.21	5.63	8.19	.....	
Jay Brand Cottonseed Meal	G.	36.00	5.00	30.00	.....	.....	14.00	A mixture of cotton seed meal and cotton seed hulls.
F. W. Brode & Co. Memphis, Tenn.	F.	39.84	6.91	40.22	6.55	6.48	.....	
Owl Brand 36 Cottonseed Meal	G.	36.00	5.00	30.00	.....	.....	14.00	A mixture of cotton seed meal and cotton seed hulls.
F. W. Brode & Co. Memphis, Tenn.	F.	36.33	5.68	44.61	6.09	7.29	.....	
Buckeye Good Cottonseed Meal	G.	36.00	5.00	30.00	.....	.....	14.00	
Buckeye Cotton Oil Co. Cincinnati, Ohio.	F.	34.59	6.09	44.60	5.80	7.92	12.45	

Good Cottonseed Meal	G.	36.00	5.50	27.00	.....	.....	14.00	Upland cottonseed only.
Central Oil Co.	F.	36.31	6.36	43.20	6.27	7.86	.....	
Macon, Ga.								
Good Cottonseed Meal	G.	36.00	5.00	.....	.....	.....	14.00	Cottonseed only.
The Cotton Seed Products Co.	F.	38.03	7.32	38.23	6.33	10.09	.....	
Louisville, Ky.								
Bull Brand Cottonseed Meal	G.	43.00	6.00	26.00	.....	.....	10.00	Pressed cottonseed.
Humphrey's Godwin Co.	F.	43.16	6.64	36.06	5.94	8.20	.....	
Memphis, Tenn.								
Danish Brand Cottonseed Meal	G.	36.00	5.00	25.00	.....	.....	15.00	Pressed cottonseed.
Humphrey's-Godwin Co.	F.	34.53	5.73	48.24	5.49	6.01	13.80	
Memphis, Tenn.								
For-fat Brand Cottonseed Meal	G.	38.55	5.00	25.00	.....	.....	12.00	Pressed cottonseed.
Humphrey's-Godwin Co.	F.	38.15	7.20	39.64	6.39	8.62	.....	
Memphis, Tenn.								
Star Brand Cottonseed Meal	G.	36.00	6.00	24.00	.....	.....	14.00	Pressed cottonseed.
C. L. Montgomery Co.	F.	37.23	6.48	42.96	6.71	6.62	.....	
Memphis, Tenn.								
Puritan Cottonseed Meal	G.	36.00	5.00	30.00	.....	.....	15.00	
J. E. Soper Co.	F.	39.41	7.29	40.19	6.24	6.87	.....	
Boston, Mass.								
Good Cottonseed Meal	G.	36.00	5.50	27.00	.....	.....	14.00	Upland cottonseed only.
Taylor Commission Co.	F.	36.91	6.18	42.26	6.24	8.41	.....	
Atlanta, Ga.								
DAIRY FEEDS								
Sucrene Dairy Feed	G.	16.50	3.50	48.00	.....	.....	10.00	Wheat bran, linseed meal, prime cottonseed meal, cocoanut meal, corn gluten feed, corn feed meal, ground and bolted grain screenings, clipped oat by products, molasses, salt and calcium carbonate.
American Milling Co.	F.	16.90	4.96	58.64	7.58	11.92	12.79	
Peoria, Ill.								
Iroquois Creamery Feed	G.	18.00	4.00	58.00	.....	.....	9.00	Corn feed meal, hominy feed, corn gluten feed, cottonseed meal, oat shorts, oat hulls, wheat bran and wheat middlings, ½ of 1% salt.
Armour Grain Co.	F.	19.52	5.16	60.88	5.41	9.03	9.00	
Chicago, Ill.								
Centaur Feed	G.	12.00	4.00	.....	.....	.....	8.00	Linseed oil meal, hominy feed, corn meal, crushed oats, wheat bran, mill run screenings and salt.
Chapin & Co.	F.	12.09	3.54	68.92	4.61	10.84	5.99	
Hammond, Ind.								
Unicorn Dairy Ration	G.	24.00	4.50	50.00	.....	.....	10.00	Cottonseed meal, linseed meal, gluten meal, corn gluten feed, corn oil meal, brewer's grains, wheat bran with mill run screenings, hominy meal and salt.
Chapin & Co.	F.	25.68	5.31	52.26	7.77	8.98	10.00	
Hammond, Ind.								

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber.	
Master Grain Ration Cloverleaf Miling Co. Buffalo, N. Y.	G. F.	24.00 23.09	5.00 4.61	50.00 54.53	..... 6.20	..... 11.57	10.00 6.24	Cottonseed meal, pure old process linseed meal, cocoanut oil meal, corn gluten feed, wheat bran, wheat middlings, dried grain from barley malt, corn, molasses and ½ of 1% salt.
Crosby's Ready Ration E. Crosby & Co. Brattleboro, Vt.	G. F.	25.00 25.98	6.00 6.00	59.00 52.57	..... 5.13	..... 10.32	11.00 9.14	Corn, distiller's dried grains, brewer's dried grains, linseed oil meal, cottonseed meal, meal sprouts, wheat bran, wheat middlings, corn gluten feed, ½ of 1% salt.
Cushing's Dairy Feed J. Cushing Co. Fitchburg, Mass.	G. F.	24.00 23.49	5.00 5.59	50.00 55.00	..... 5.95	..... 9.97	12.00 12.00	Dried brewer's grains, corn gluten feed, hominy feed, old process oil meal, cocoanut meal, cotton-seed meal, wheat bran and wheat middling, ground barley, ¾ of 1% salt. Wheat bran and wheat middlings may contain mill run of screenings.
Eastern States Dairy Ration Eastern States Farmers Exchange Springfield, Mass.	G. F.	22.00 23.94	5.00 5.24	55.00 55.67	..... 5.17	..... 9.98	10.00 9.27	Corn gluten feed, old process oil meal, wheat bran, hominy feed, pure ground oats, ½ of 1% salt.
Eshelman's 24 Dairy Feed John W. Eshelman & Sons Lancaster, Pa.	G. F.	24.00 25.30	5.00 5.48	..... 52.70	..... 6.98	..... 9.54	12.00 10.16	Cottonseed meal, wheat bran, corn gluten feed, corn gluten meal, old process oil meal, rape seed meal, molasses, alfalfa meal, cocoanut oil meal, wheat middlings, ½ of 1% salt.
Diamond A Dairy Ration Foster Grain Co. Lowell, Mass.	G. F.	24.00 22.74	6.00 5.58	50.00 55.80	..... 6.01	..... 9.87	12.00 8.88	Old process oil meal, cottonseed meal, corn gluten feed, wheat bran, wheat middlings, alfalfa meal, ground oats, ground barley, oat meal by products, oat middlings, oat shorts, oat hulls, ¾ of 1 % salt.

Grandin's Twin-Six Dairy Feed	G.	22.00	5.00	50.00	.....	.....	13.50	Linseed oil meal, cottonseed meal, corn gluten feed, rice bran, wheat bran, wheat middlings, alfalfa meal, hominy feed, corn feed meal, wheat bran with palm oil, red dog flour, a small quantity of salt.
D. H. Grandin Milling Co. Jamestown, N. Y.	F.	24.52	5.58	54.71	6.20	8.99	11.62	
Gwinn's Dairy Feed	G.	14.00	4.00	.....	.....	.....	11.00	Wheat bran and middlings with screenings not exceeding mill run.
The Gwinn Milling Co. Columbus, Ohio.	F.	16.38	5.55	62.83	4.39	10.85	10.83	
Minnetonka Dairy Feed	G.	15.00	3.50	52.50	.....	.....	12.50	Cottonseed meal, molasses, clipped oat by products, ground and bolted grain screenings, salt.
International Stock Feed Co. Minneapolis, Minn.	F.	15.94	3.71	60.90	8.91	10.54	12.50	
International Diamond Dairy Feed	G.	24.00	5.00	42.00	.....	.....	10.00	Corn gluten feed, wheat bran, linseed oil meal, cottonseed, molasses, ground and bolted screenings from wheat, salt.
International Sugar Feed Co. Minneapolis, Minn.	F.	24.42	4.54	52.33	7.91	10.80	10.00	
International Ready Ration	G.	20.00	5.00	45.00	.....	.....	11.50	Old process oil meal, cottonseed meal, corn gluten feed, wheat bran, molasses, ground clipped oat by products, ground cleaned grain screenings.
International Sugar Feed Co. Minneapolis, Minn.	F.	17.77	5.10	56.29	9.83	11.01	11.99	
International Special Dairy Feed	G.	15.00	4.50	47.00	.....	.....	12.00	Old process oil meal, cottonseed meal, corn gluten feed, wheat bran, molasses, ground clipped oat by products, ground cleaned grain screenings, salt.
International Sugar Feed Co. Minneapolis, Minn.	F.	15.37	5.73	61.12	8.16	9.62	10.92	
Mormilk Ready Ration Dairy Feed	G.	25.00	6.00	52.00	.....	.....	10.00	Corn gluten feed, winter wheat bran, cottonseed meal, old process linseed meal, hominy feed, cereal wheat feed, corn oil meal.
Interstate Feed Association Toledo, Ohio.	F.	25.31	4.93	54.71	5.26	9.79	8.88	
Larro Feed	G.	20.00	3.00	58.00	.....	.....	14.00	Cottonseed meal, corn gluten feed, old process linseed oil meal, dried beet pulp, wheat bran, wheat middlings and ¾ of 1% salt. Bran and middlings may contain ground screenings not exceeding mill run.
The Larrowe Milling Co. Detroit, Mich.	F.	21.71	3.83	59.78	5.27	9.41	12.82	
Bull Brand Dairy Ration	G.	24.00	5.00	50.00	.....	.....	12.00	Dried brewer's grains, dried malt grains, old process oil meal, cottonseed meal, corn gluten feed, hominy feed, cocoanut meal, wheat bran, wheat middlings, ground barley, and ¾ of 1% salt. Wheat bran and wheat middlings may contain ground screenings not exceeding mill run.
Maritime Trading Corp. Buffalo, N. Y.	F.	24.23	5.32	56.21	5.45	8.79	10.97	

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Seavey 24% Dairy Ration Oswego M lling Co. Oswego, N. Y.	G. F.	24.00 26.97	5.00 5.18	..... 53.41	..... 6.09	..... 8.35	14.00 8.69	Cottonseed meal, corn gluten feed, old process oil meal, corn feed meal, hominy feed, yeast grains cocoa oil meal, wheat bran and wheat middlings, with mill run of screenings, brewer's dried grains, peannt oil meal, malt sprouts, pea meal, barley and salt.
Pilgrim 1620 Ration Park and Pollard Co. Boston, Mass.	G. F.	9.00 9.25	4.00 3.59	60.00 70.98	..... 5.39	..... 10.79	9.00 8.72	Ground ear corn, barley, oats, rice bran, calcium carbonate and salt.
Stevens 44 Dairy Ration Park and Pollard Co. Boston, Mass.	G. F.	24.00 25.31	5.00 4.58	..... 54.08	..... 6.64	..... 9.39	14.00 12.26	Linseed oil meal, cottonseed meal, wheat bran with mill run of screenings, corn gluten feeds, cocoanut oil meal,pea meal, brewer's dried grains, ground barley, what middlings, hominy meal, corn germ meal, buckwheat middlings, corn meal, buck-wheat middlings, corn meal, salt.
Quarts Dairy Feed G. E. Patterson & Co. Memphis, Tenn.	G. F.	24.00 25.39	3.50 4.06	45.00 55.93	..... 5.40	..... 9.22	15.00 15.00	Made from alfalfa, cottonseed meal, wheat, shorts and molasses.
Pillsbury's Dairy Ration Pillsbury Flour Mills Co. Minneapolis, Minn.	G. F.	19.00 19.35	4.00 4.00	50.00 59.96	..... 7.32	..... 9.37	11.00 11.00	Ground oats, wheat bran, hominy feed, linseed meal, corn gluten feed, wheat standard middlings, cottonseed meal and mineral matter.
Iowa Dairy Feed Purity Oats Co. Davenport, Iowa.	G. F.	24.00 23.55	5.00 5.40	50.00 57.18	..... 5.61	..... 8.26	10.00 10.00	Cottonseed meal, corn meal, hominy feed, flour middlings, cooked barley and oat meal, brewers dried grains, oil meal, corn gluten feed, oatmeal mill by products, oat shorts, oat hulls, oat mid-dlings, and 1% of table salt.
Big Q Dairy Ration Quaker Oats Co. Chicago, Ill.	G. F.	21.00 21.89	4.50 4.50	50.00 58.69	..... 6.05	..... 8.87	11.00 9.89	Cottonseed meal, corn distiller's grains, hominy feed, corn gluten feed, old process linseed oil meal, wheat middlings, and wheat bran with ground screenings not exceeding mill run, oat meal mill by products, oat middlings, oat hulls, oat shorts, calcium phosphate, 1% salt.

Purina Chow-Chow Feed	G.	24.00	4.30	53.00	.....	.....	12.00	Linseed oil meal, gluten feed from corn, hominy feed, cottonseed meal, ground alfalfa, molasses and 1% salt.
Ralston Purina Co., Inc. St. Louis, Mo.	F.	25.04	4.69	54.24	6.25	9.78	10.18	
New Hampshire Dairy Ration	G.	23.00	5.00	43.00	...	...	9.00	Ground fancy oats, oil meal, bran, cottonseed meal, gluten feed.
Rockingham County Farmer's Association Exeter, N. H.	F.	23.23	5.33	56.27	4.83	10.34	8.36	
Paragon Dairy Feed	G.	22.00	4.00	44.00	.....	.....	14.00	Cottonseed meal, linseed meal, bran not exceeding mill run of screenings, corn gluten feed, oat feed, oat meal mill by products, oat middlings, oat shorts, oat hulls, and not over 1% salt.
St. Albans Grain Co. St. Albans, Vt.	F.	22.24	4.46	58.28	6.05	8.97	13.06	
Wirthmore Balanced Ration	G.	25.00	5.50	55.00	.....	.....	11.00	Cottonseed meal, linseed meal, corn gluten feed, wheat middlings, wheat bran not exceeding mill run screenings, choice dried brewer's grains, hominy or corn meal and not over ½ of 1% salt.
St. Albans Grain Co. St. Albans, Vt.	F.	25.65	6.16	54.37	5.10	8.72	10.52	
Red Brand Ti-O-Ga Dairy Feed	G.	23.00	3.50	.....	.....	.....	11.00	Cottonseed meal, old process linseed meal, wheat bran, cane molasses, wheat middlings, cocoanut oil meal, dried brewer's grains, corn gluten meal, corn gluten feed, barley, salt.
Tioga Mill & Elevator Co. Waverly, N. Y.	F.	25.71	5.39	51.02	7.00	10.85	9.11	
White Brand Ti-O-Ga Dairy Feed	G.	17.00	4.00	.....	.....	.....	12.00	Wheat middlings, cane molasses, cottonseed meal, corn feed meal, wheat bran, corn gluten feed, hominy feed, corn gluten meal, brewer's dried grains, salt, copra meal, barley.
Tioga Mill & Elevator Co. Waverly, N. Y.	F.	22.86	5.50	55.57	5.42	10.65	8.92	
Union Grains, Biles Ready Dairy Ration	G.	24.00	5.00	50.00	.....	.....	10.00	Corn distiller's dried grains, choice cottonseed meal, old process linseed meal, white wheat middlings, winter wheat bran, hominy meal, cocoanut oil meal, corn gluten feed, brewer's dried grains, barley, malt, ½ of 1% table salt.
Ubiko Milling Co. Cincinnati, Ohio.	F.	24.52	5.74	54.26	6.32	9.16	8.17	
Mel-O Dairy Ration	G.	20.00	5.00	.....	.....	.....	9.00	Gluten feed, distillers dried grains, pure linseed meal, pure wheat bran, pure wheat middlings, cottonseed meal, pure ground barley, pure ground oats, corn oil cake meal, salt.
U. S. Food Products Corp. Peoria, Ill.	F.	22.15	5.00	57.92	6.28	8.65	7.86	
Success Dairy Feed	G.	16.00	4.00	.....	.....	.....	9.00	Corn gluten feed, distiller's dried grains, molasses, linseed meal, cottonseed meal, pure wheat bran, pure wheat middlings, pure ground barley, pure ground oats, kiln dried fine table salt.
U. S. Food Products Corp. Peoria, Ill.	F.	19.79	4.66	56.68	8.89	10.08	6.92	

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Your Choice Dairy Ration	G.	25.00	6.00	.....	.....	.....	9.00	Corn gluten feed, distillers' dried grains, pure linseed meal, pure wheat bran, pure wheat middlings, cottonseed meal, pure ground barley, pure ground oats, corn oil cake meal, kiln dried fine table salt.
U. S. Food Products Corp. Peoria, Ill.	F.	26.97	6.00	51.81	6.04	9.18	8.83	
GLUTEN FEEDS								
Cream of Corn Gluten Feed	G.	23.00	1.50	52.00	.....	.....	8.00	
American Maize Products Co. New York, N. Y.	F.	25.74	2.43	60.79	2.27	8.77	.....	
Clinton Corn Gluten Feed	G.	23.00	2.00	52.00	.....	.....	8.00	
Clinton Corn Syrup Refining Co. Clinton, Iowa	F.	24.86	2.00	60.20	2.75	10.19	.....	
Buffalo Corn Gluten Feed	G.	23.00	1.00	.....	.....	.....	8.50	
Corn Products Refining Co. New York, N. Y.	F.	24.25	3.51	58.83	3.73	9.68	.....	
Diamond Gluten Meal	G.	40.00	1.00	.....	.....	.....	4.00	Corn gluten meal.
Corn Products Refining Co. New York, N. Y.	F.	41.07	1.84	45.87	1.38	9.84	.....	
Staley's Corn Gluten Feed	G.	23.00	1.00	50.00	.....	.....	8.00	
A. E. Staley Mfg. Co. Decatur, Ill.	F.	27.19	2.14	57.66	4.12	8.59	.....	
HOMINY FEEDS								
Homco Hominy Feed	G.	10.00	6.00	.....	.....	.....	6.00	With corn screenings added and part of germ removed, from white corn only.
American Hominy Company Indianapolis, Ind.	F.	10.61	8.63	69.16	2.83	8.77	.....	
Paragon Hominy Meal	G.	9.50	7.50	60.00	.....	.....	7.00	
Chas. M. Cox Co. Boston, Mass.	F.	10.06	6.26	71.14	2.69	9.85	.....	

Evans Hominy Feed, "Emco"	G.	10.00	7.50	.....	.....	.....	7.00	Guaranteed absolutely pure and free from mixtures.
Evans Milling Co.	F.	10.24	7.86	69.77	2.74	9.39	.....	
Indianapolis, Ind.								
Mystic White Hominy Feed	G.	8.50	4.00	.....	.....	.....	5.00	
International Milling Co.	F.	9.85	5.62	72.50	1.97	10.06	.....	
Sioux City, Iowa.								
Badger Hominy Feed	G.	10.00	6.00	.....	.....	.....	5.00	Made from white corn.
Chas. A. Krause Milling Co.	F.	10.59	5.19	71.65	2.23	10.34	.....	
Milwaukee, Wis.								
Dandy Hominy Feed	G.	10.00	7.00	50.00	.....	.....	6.00	
Louisville Milling Co.	F.	11.29	6.14	68.87	3.64	10.06	.....	
Louisville, Ky.								
Logan Hominy Feed	G.	10.00	7.00	60.00	.....	.....	6.00	
Snyder Milling Co.	F.	10.04	7.00	68.98	2.60	11.38	.....	
Chillicothe, Ohio								
HOG FEEDS								
Bicorn Hog Feed	G.	17.50	4.00	.....	.....	.....	6.00	Corn feed meal, corn germ meal, corn gluten feed, barley, digester tankage, wheat middlings, linseed meal, oats, bone meal, starch mill corn solubles with calcium salts, kaffir meal and salt.
Chapin & Co.	F.	16.99	3.69	62.70	5.79	10.83	5.69	
Hammond, Ind.								
Diamond A. Hog Meal	G.	18.00	6.00	50.00	.....	.....	9.00	Corn feed meal, wheat middlings, rice meal, digester tankage, copra meal and ½ of 1% salt.
Foster Grain Co.	F.	17.38	4.52	62.73	5.66	9.71	8.91	
Lowell, Mass.								
Wirthmore Hog Feed	G.	17.00	6.00	50.00	.....	.....	7.00	Tankage, wheat middlings, not exceeding mill run of screenings, hominy, corn meal, linseed meal, peanut feed, red dog flour, and about ½ of 1% salt.
St. Albans Grain Co.	F.	21.10	6.35	53.70	8.09	10.76	5.91	
St. Albans, Vt.								
HORSE FEEDS								
Quality Horse Feed	G.	9.00	3.00	50.00	.....	.....	10.00	Cracked corn, rolled oats, alfalfa, molasses.
J. Cushing Co.	F.	11.09	3.29	68.38	4.30	12.94	10.00	
Fitchburg, Mass.								

Brand and name and address of manufacturer	Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
	Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Lexington Horse Feed	G. 10.00	2.00	50.00	.....	.....	12.00	Oat screenings, alfalfa meal and molasses, cracked corn, oats, barley.
Prairie State Milling Co. Chicago, Ill.	F. 8.96	2.41	67.38	6.73	14.52	12.00	
LINSEED MEALS							
Oil Meal	G. 32.00	5.00	.....	.....	.....	8.00	Old Process.
American Linseed Co. Buffalo, N. Y.	F. 38.55	5.44	40.32	5.10	10.59	.....	
Old Process Ground Oil Cake	G. 31.00	6.00	.....	.....	.....	10.00	
Archer-Daniels Linseed Co. Buffalo, N. Y.	F. 29.94	6.46	47.88	6.43	9.29	.....	
Pure Old Process Oil Meal	G. 37.00	7.00	.....	.....	.....	6.00	
Kelloggs & Miller Amsterdam, N. Y.	F. 29.59	4.83	49.79	6.03	9.76	.....	
Old Process Ground Linseed Cake	G. 30.00	5.00	.....	.....	.....	9.00	
Midland Linseed Products Co. Minneapolis, Minn.	F. 30.09	6.58	45.26	7.52	10.55	.....	
Old Process Ground Linseed Cake	G. 32.00	5.00	.....	.....	.....	9.00	Argentine Brand.
Midland Linseed Products Co. Minneapolis, Minn.	F. 30.03	7.08	47.54	6.01	9.34	.....	
Oil Meal Pure Old Process	G. 31.00	5.00	.....	.....	.....	10.00	
Spencer Kellogg & Sons Buffalo, N. Y.	F. 30.48	6.12	46.91	6.28	10.21	.....	
MISCELLANEOUS FEEDS							
Quality Snowflake Meal	G. 9.50	4.50	.....	.....	.....	3.00	Ground whole corn.
J. Cushing Co. Fitchburg, Mass.	F. 9.51	3.28	76.98	1.16	9.07	.....	

Alfalfa Meal	G.	12.00	1.50	40.00	.....	.....	35.00	Made from alfalfa hay.
Denver Alfalfa Milling & Products Co. .... Lemar, Col.	F.	13.37	2.09	67.55	9.67	7.32	.....	
Dog Food	G.	30.00	10.00	.....	.....	.....	.....	
John C. Dow Co. .... Boston, Mass.	F.	21.83	6.34	52.60	4.84	14.39	.....	
Dried Brewers' Grains	G.	30.00	8.00	.....	.....	.....	12.85	
Farmers' Feed Co. .... Buffalo, N. Y.	F.	22.64	6.34	59.77	3.68	7.57	13.89	
Oat Feed	G.	5.25	2.50	.....	.....	.....	28.00	
Robin Hood Mills, Ltd. .... Moose Jaw, Canada	F.	8.64	3.36	76.96	4.55	6.49	.....	
Rye Middlings	G.	15.50	3.50	55.00	.....	.....	9.00	With ground rye screenings not exceeding mill run.
Shane Bros. & Wilson Co. .... Minneapolis, Minn.	F.	16.61	3.88	63.62	4.53	11.36	.....	
POULTRY FEEDS								
Dickinson's Globe Egg Mash	G.	20.00	5.00	55.00	.....	.....	10.00	Wheat bran, wheat middlings, alfalfa meal, ground
Albert Dickinson Co. .... Chicago, Ill.	F.	21.63	5.70	57.39	6.57	8.71	7.12	corn bran, corn feed meal, linseed meal, meat scraps, salt ½ of 1%.
Queen Poultry Mash	G.	11.00	2.50	60.00	.....	.....	10.00	Wheat bran, wheat middlings, alfalfa meal, ground
Albert Dickinson Co. .... Chicago, Ill.	F.	17.95	4.56	62.07	5.24	10.18	9.31	corn, bran, corn feed meal, linseed meal, meat scraps, salt ½ of 1%.
Protox Meat Scraps	G.	55.00	10.00	.....	.....	.....	.....	Pure ground meat scraps.
American Agricultural Chemical Co. .... New York, N. Y.	F.	51.90	13.95	.....	24.95	6.55	.....	
Beach's Beef Scraps	G.	45.00	10.00	.....	.....	.....	.....	Pure ground beef scraps for poultry and swine.
Beach Soap Co. .... Lawrence, Mass.	F.	37.45	15.14	.....	36.11	6.16	.....	
Blatchford's Egg Mash	G.	19.00	4.00	54.00	.....	.....	10.00	Contains milk and milk substitute, Blatchford's
Blatchford Calf Meal Co. .... Waukegan, Ill.	F.	20.49	4.00	52.55	13.91	9.05	8.57	calf meal, locust bean meal, unprocessed flaxseed, wheat flour, rice polish, blood flour, barley and malt sprout meal, ground beans and peas, old process oil meal, cocoa shell meal, coacoanut meal, recleaned cottonseed meal, fenugreek, dried milk, anise and salt,, also alfalfa, bone, corn, and oat meals, wheat bran and wheat middlings, meat scraps, fish, capsicum and powdered limestone.

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Capital Meat and Bone Scraps	G.	40.00	10.00	.....	.....	.....	.....	Made from meat and bone scraps.
Brown Co., Inc.	F.	19.03	16.17		28.07	5.75	.....	
Philadelphia, Pa.								
Iroquois Poultry Mash	G.	15.00	4.00	60.00	.....	.....	8.00	Corn feed meal, hominy feed, corn gluten feed, oat middlings, rolled oats, wheat bran and wheat middlings, containing mill run ground screenings, ½ of 1% salt.
Buffalo Cereal Co.	F.	16.72	5.76	63.88	4.20	9.44	7.82	
Buffalo, N. Y.								
Vigor Laying Mash	G.	18.00	4.00	55.00	.....	.....	8.00	Oat middlings, oat flour, wheat flour, wheat middlings, alfalfa flour, corn feed meal, granulated meat meal.
J. Cushing Co.	F.	17.57	4.37	61.26	5.34	11.46	9.24	
Fitchburg, Mass.								
Dow's Ground Beef Scraps	G.	43.00	12.00	.....	.....	.....	.....	Made from meat scraps.
John C. Dow Co.	F.	44.32	12.36	.....	28.61	6.97	.....	
Boston, Mass.								
Elmore Egg Mash	G.	18.00	4.00	.....	.....	.....	8.00	Corn meal, rolled oats, ground barley, wheat flour middlings, hominy feed, wheat bran, meat and bone meal, corn gluten feed, alfalfa meal, old process oil meal, salt.
Elmore Milling Co.	F.	19.76	4.67	56.59	8.25	10.73	6.49	
Oneonta, N. Y.								
Eshelman's Laying Mash	G.	20.00	5.00	.....	.....	.....	7.00	Guaranteed twenty per cent beef and fish scraps, corn gluten feed, corn feed meal, cottonseed meal, old process oil meal, wheat middlings, wheat bran, alfalfa meal, oat chop, reground grain screenings, hominy feed and ground barley.
John W. Eshelman & Son	F.	21.80	5.22	55.20	7.92	9.86	5.92	
Lancaster, Pa.								
Diamond A. Dry Mash	G.	18.00	3.50	60.00	.....	.....	9.00	Ground oats, ground barley, corn gluten feed, beef scraps, fish scraps, wheat bran, wheat middlings, corn meal, ¾ of 1% salt.
Foster Grain Co.	F.	19.44	4.37	59.13	6.93	10.13	8.65	
Lowell, Mass.								

Grandin's Poultry Dry Mash	G.	20.00	3.00	50.00	.....	.....	10.00	Ground fish, meat, bone, powdered buttermilk, corn, wheat, oats, barley, kaffir corn, milo maize, buckwheat, alfalfa, calcium carbonate, wheat bran, wheat middlings, linseed oil meal, corn, gluten feed and salt, bran middlings may contain ground screenings not exceeding mill run.
D. H. Grandin Milling Co.	F.	19.31	4.23	53.58	13.34	9.54	10.00	
Jamestown, N. Y.								
Greene's Buttermilk First Feed for Baby Chicks	G.	17.00	3.00	.....	.....	.....	7.00	White corn steam cooked, yellow corn germ meal, shredded cod fish steam cooked, hulled oats steam cooked, dried buttermilk steam cooked, entire wheat, cod livers steam cooked, oil meal, gluten meal, dried blood, flax screenings, shell lime and fine ground meat and bone scraps. Mixed in proper proportions.
Green Chick Feed Co.	F.	18.56	4.26	50.18	18.16	8.94	7.00	
Marblehead, Mass.								
Hinckley's Poultry Feed	G.	40.00	12.00	.....	.....	.....	.....	Cooked meat and bone scraps, animal products.
Hinckley Rendering Co.	F.	36.78	10.73	.....	37.55	6.80	.....	
Somerville, Mass.								
Illinois Laying Mash	G.	18.00	4.25	.....	.....	.....	8.00	Wheat bran, wheat middlings, oat middlings, oat flour, corn feed meal, alfalfa flour, granulated meat meal.
Illinois Feed & Elevator Co.	F.	16.46	4.40	62.63	6.11	10.40	7.24	
Bloomington, Ill.								
Perfection Poultry Feed	G.	55.00	8.00	.....	.....	.....	.....	
Lowell Rendering Co.	F.	57.15	12.02	.....	19.90	9.32	.....	
Lowell, Mass.								
Peerless Poultry Feed	G.	50.00	12.00	.....	.....	.....	.....	Cooked meat and bone, animal products.
Lowell Rendering Co.	F.	39.20	12.44	.....	36.14	7.13	.....	
Lowell, Mass.								
Manchester Poultry Feed	G.	40.00	8.00	.....	.....	.....	.....	Prepared from cooked meat and bone scraps, animal products.
Manchester Rendering Co.	F.	41.13	12.96	.....	33.38	6.08	.....	
Manchester, N. H.								
Marsh's Pure Ground Scraps	G.	50.00	10.00	.....	.....	.....	.....	Carefully selected cooked meat and bone scraps.
The Geo. E. Marsh Co.	F.	42.61	10.64	.....	34.24	7.78	.....	
Lynn, Mass.								
Aunt Mary's Laying Mash	G.	18.00	1.50	40.00	.....	.....	12.00	Ground corn, wheat, oats, barley, kaffir corn, buckwheat, alfalfa, fish bone, wheat bran and middlings with mill run of screenings, calcium carbonate and salt.
Oswego Milling Co.	F.	19.90	3.52	55.18	11.01	10.39	10.19	
Oswego, N. Y.								

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moisture	Crude Fiber.	
Lay or Bust Park & Pollard Co. Boston, Mass.	G. F.	18.00 18.73	1.50 3.43	40.00 51.58	..... 16.03	..... 10.23	12.00 11.73	Ground corn, wheat, wheat screenings, oats, barley, kaffir corn, buckwheat, alfalfa fish meat, bone, wheat bran with mill run of screenings, wheat middlings, calcium carbonate, and salt.
Purina Chicken Chowder Feed Purina Mills St. Louis, Mo.	G. F.	18.00 21.13	4.00 4.00	..... 57.77	..... 7.82	..... 9.28	10.00 10.00	With charcoal, wheat middlings, wheat bran, gluten feed from corn, corn meal, alfalfa flour, linseed flour, granulated meat, charcoal, not over 1% salt.
Purina Chicken Fatena Feed Purina Mills St. Louis, Mo.	G. F.	9.00 15.26	5.00 5.76	..... 66.85	..... 2.45	..... 9.68	9.00 7.82	Ground oats, ground corn, kaffir meal, barley meal, corn germ meal, wheat middlings, linseed meal and ground sunflower seed.
Ful-O-Pep Dry Mash Quaker Oats Company Chicago, Ill.	G. F.	20.00 21.27	4.00 4.74	49.00 54.68	..... 9.98	..... 9.33	10.00 8.74	Meat scraps, fish meal, oat meal, alfalfa meal, wheat bran with ground screenings not exceeding mill run, bone meal, cottonseed meal, yellow hominy feed, hominy feed, corn gluten feed, ground grain screenings.
Security Laying Mash Read-Esty Co. Farmington, N. H.	G. F.	..... 16.75	..... 5.00	..... 61.47	..... 5.94	..... 10.84	..... 7.29	Buttermilk, corn meal, corn feed meal, ground barley, wheat bran, wheat middlings, oil meal bone, meat scraps.
New Hampshire Poultry Ration Rockingham County Farmers' Association Exeter, N. H.	G. F.	22.00 21.89	5.00 5.92	41.00 55.07	..... 7.23	..... 9.89	6.00 5.86	Diamond gluten, red dog middlings, ground fancy oats, bran, hominy, high-grade meat scraps.
Chick-Chuk Russia Cement Co. Gloucester, Mass.	G. F.	15.00 15.53	2.00 1.38	....	..... 42.80	..... 8.28	1.00	Bone containing calcium carbonate, calcium phosphate, iron, silica, etc. 30.00%; salt, 2.00%. Pure clean sweet fish meal, prepared exclusively from wholesome food fish as cod, haddock, and pollock.
Wirthmore Buttermilk Baby Chick Food St. Albans Grain Co. St. Albans, Vt.	G. F.	13.50 15.20	5.00 5.00	60.00 64.04	..... 5.26	..... 10.50	5.00 5.00	Dried buttermilk, dried milk albumen, fine ground hulled oats, bone meal, white corn, ground wheat, hominy feed and wheat middlings.

Wirthmore Growing Feed	G.	15.00	4.50	50.00	.....	.....	7.50	With milk albumen and scraps, dried milk albumen, edible bone meal, ground wheat, corn, oats, barley wheat bran, and wheat middlings not exceeding mill run of screenings, red dog flour and choice fine ground beef scraps.
St. Albans Grain Co.	F.	15.48	4.00	62.64	6.71	11.17	6.29	
St. Albans, Vt.								
Wirthmore Mash Feed	G.	20.00	4.00	50.00	.....	.....	8.50	Fish and scraps with milk albumen, dried milk albumen, ground oats, barley, corn, wheat bran, wheat middlings, corn gluten feed, beet pulp, rolled oats, choice fine ground beef scraps, fish meal, buckwheat, and about ¾ of 1% salt.
St. Albans Grain Co.	F.	20.40	4.28	55.25	9.78	10.29	8.31	
St. Albans, Vt.								
Syragold Dry Mash	G.	18.00	4.00	50.00	.....	.....	10.00	Ground corn, ground oats, hominy feed, corn gluten feed, old process linseed meal, bone and meat meal, wheat bran and flour middlings, with mill run of screenings and salt.
Syracuse Milling Co.	F.	19.98	4.33	59.20	6.35	10.14	9.18	
Syracuse, N. Y.								
Ti-O-Ga Laying Food	G.	17.00	2.50	.....	5.00	.....	6.00	Wheat middlings, old process linseed oil meal, meat and bone scraps, corn gluten and hominy feed, wheat bran, corn feed meal, barley, phosphate of lime, kaffir corn meal, cocoanut oil meal and corn gluten feed.
Tioga Mill & Elevated Co.	F.	20.58	4.06	56.07	9.42	9.87	5.97	
Waverly, N. Y.								
Ubiko Buttermilk Growing Mash	G.	15.00	3.00	55.00	10.00	.....	6.00	Meat meal, bone meal, corn meal, wheat bran, and middlings, whole ground oats, ground barley, old process linseed meal and dried buttermilk.
The Ubiko Milling Co.	F.	15.91	3.64	59.09	11.37	9.99	6.00	
Cincinnati, Ohio.								
Blue Seal Dry Mash	G.	16.00	3.00	55.00	.....	.....	10.00	Wheat feed, corn meal, gluten feed, rolled oats, ground oats, beef scraps, beet pulp, oil meal and calf meal.
H. K. Webster Company	F.	21.01	5.44	57.01	6.52	10.02	8.42	
Lawrence, Mass.								
Meat and Bone Poultry Scraps	G.	45.00	15.00	.....	.....	.....	.....	
Whitman & Pratt Rendering Co.	F.	39.49	10.41	.....	38.25	6.82	.....	
Boston, Mass.								
WHEAT FEEDS								
Trojan Bran	G.	14.50	4.00	52.00	.....	.....	9.50	Pure wheat feed.
Allen & Wheeler Co.	F.	16.20	4.02	63.14	6.59	10.05	.....	
Troy, Ohio.								
Trojan Mixed Feed	G.	14.50	4.00	52.00	.....	.....	6.00	Ground screenings not exeeeding mill run.
Allen & Wheeler Co.	F.	16.37	4.85	62.85	5.51	10.42	.....	
Troy, Ohio.								

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Standard Wheat Middlings	G.	14.00	3.50	50.00	.....	.....	11.50	Ground screenings not exceeding mill run.
Atlas Flour Mills	F.	14.00	4.16	65.79	5.44	10.61	.....	
Milwaukee, Wis.								
Capital Mixed Feed	G.	14.00	3.00	60.00	.....	.....	7.00	Wheat bran and second-class flour.
E. W. Bailey & Co.	F.	16.02	3.85	64.66	4.29	11.18	.....	
Swanton, Vt.								
Pennant Brand Bran	G.	14.50	4.00	.....	.....	.....	10.00	
E. W. Bailey & Co.	F.	16.28	4.04	62.88	6.56	10.24	.....	
Montpelier, Vt.								
Big Diamond Brand	G.	13.00	3.50	.....	.....	.....	13.90	Wheat bran with ground screenings not exceeding mill run.
Big Diamond Mills Co.	F.	13.88	4.17	66.51	6.56	8.88	.....	
Minneapolis, Minn.								
Big Diamond Standard Middlings	G.	15.00	4.50	.....	.....	.....	11.90	Big diamond wheat standard middlings, with ground screening not exceeding mill run.
Big Diamond Mills Co.	F.	15.72	3.92	64.52	4.77	11.07	.....	
Minneapolis, Minn.								
Wheat Bran	G.	14.50	3.50	.....	.....	.....	12.00	
Commercial Milling Co.	F.	15.67	5.00	63.00	5.66	10.67	.....	
Detroit, Mich.								
Quality Heavy Mixed Feed	G.	15.00	4.00	.....	.....	.....	8.00	Wheat bran, second class flour, and wheat middlings, wheat bran and wheat middlings may contain ground screenings not exceeding mill run.
J. Cushing Co.	F.	15.12	4.86	64.40	4.63	10.99	.....	
Fitchburg, Mass.								
Duluth Imperial Bran	G.	15.00	4.00	64.00	.....	.....	11.50	Wheat bran with ground screenings not exceeding mill run.
Duluth-Superior Milling Co.	F.	16.17	5.18	58.80	5.13	11.72	.....	
Duluth, Minn.								
Wheat Middlings	G.	14.00	4.00	53.00	.....	.....	11.00	Wheat by-products with ground screenings not exceeding mill run.
Eagle Roller Mill Co.	F.	15.41	5.38	62.63	5.06	11.52	.....	
New Ulm, Minn.								

E. A. Co. Wheat Bran	G.	14.00	3.00	.....	.....	.....	12.00	Ground screenings not exceeding mill run.
Evrett Aughenbaugh & Co.	F.	14.54	3.57	65.42	6.39	10.08	.....	
Waseca, Minn.								
E. A. Co. Wheat Middlings	G.	15.00	3.00	.....	.....	.....	10.00	Standard and flour middlings and ground screenings not exceeding mill run.
Evrett Aughenbaugh & Co.	F.	19.52	4.15	60.23	4.36	11.74	.....	
Waseca, Minn.								
Dairy Maid Flour Middlings	G.	12.00	3.00	43.00	.....	.....	10.00	Winter wheat flour middlings with ground screenings not exceeding mill run.
Federal Milling Co.	F.	16.81	3.68	64.80	3.78	10.93	.....	
Lockport, N. Y.								
Sphinx Fancy Mixed Feed	G.	13.50	3.00	50.00	.....	.....	11.00	Hard wheat with ground screenings not exceeding mill run.
Federal Milling Co.	F.	18.73	5.05	60.56	4.37	11.29	.....	
Lockport, N. Y.								
Improved Grafton Wheat Feed	G.	14.00	2.70	64.10	.....	.....	8.40	
Grafton Roller Mill Co.	F.	14.80	4.99	65.84	4.11	10.26	.....	
Grafton, N. Dak.								
Blackhawk Bran	G.	13.30	3.00	.....	.....	.....	12.00	Pure wheat bran.
International Milling Co.	F.	15.91	5.00	62.40	6.24	10.45	.....	
Minneapolis, Minn.								
Blackhawk Standard Middlings	G.	14.75	3.75	.....	.....	.....	9.50	Ground screenings not exceeding mill run.
International Milling Co.	F.	16.20	3.78	64.91	4.85	10.26	.....	
Minneapolis, Minn.								
I-H Wheat Bran	G.	14.50	3.50	52.00	.....	.....	11.00	Ground screenings from mill run not exceeding 8%.
Ismert-Hincke Milling Co.	F.	15.91	4.89	61.59	6.75	10.86	.....	
Kansas City, Kan.								
Kasco Mixed Feed	G.	15.00	4.00	57.00	.....	.....	10.00	Wheat bran and low grade flour with ground screenings not exceeding mill run.
Kasco Mills	F.	16.13	4.71	63.02	4.97	11.17	.....	
Waverly, N. Y.								
Wheat Bran and Screenings	G.	14.50	3.50	.....	.....	.....	10.00	
Kaull Milling Co.	F.	17.57	3.85	60.32	6.48	11.78	.....	
Glen Elder, Kansas.								
Bran	G.	14.00	2.80	.....	.....	.....	14.80	
La Grange Mills	F.	14.01	4.99	63.92	6.29	10.79	.....	
Red Wing, Minn.								

Brand and name and address of manufacturer	Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
	Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Snow Flake Middlings Lawrenceburg Roller Mills Co. Lawrenceburg, Ind.	G. 16.00 F. 17.40	4.50 4.50	53.00 62.09	..... 4.47	..... 11.54	7.50	Pure wheat product with ground screenings not exceeding mill run.
Snowflake Mixed Feed Lawrenceburg Roller Mills Co. Lawrenceburg, Ind.	G. 14.00 F. 15.94	3.00 3.91	55.00 63.96	..... 6.20	..... 9.99	8.50	Wheat product with ground screenings not exceeding mill run.
Elmco Red Dog Flour Listman Milling Co. LaCrosse, Wis.	G. 15.20 F. 15.47	1.30 4.87	..... 64.48	..... 3.37	..... 11.31	2.40	Pure and unadulterated strong rich feed.
Wasco Bran Lyon & Greenleaf Co. Wauseon, Ohio.	G. 14.50 F. 15.76	4.00 4.34	54.00 62.95	..... 6.87	..... 10.08	9.50	Soft winter wheat.
Waseo Middlings Lyon & Greenleaf Co. Wauseon, Ohio.	G. 17.00 F. 17.25	4.00 4.37	56.00 63.94	..... 4.12	..... 10.32	6.00	Ground screenings not exceeding mill run.
Waseo Mixed Feed Lyon & Greenleaf Co. Wauseon, Ohio.	G. 15.00 F. 15.70	4.00 4.00	..... 62.98	..... 5.31	..... 12.01	8.00	Ground screenings not exceeding mill run. Soft winter wheat.
Fancy Canadian Bran Maple Leaf Milling Co. Toronto, Canada.	G. 14.00 F. 17.68	4.50 5.29	48.00 60.19	..... 5.19	..... 11.65	10.00	
Fancy Canadian Middlings Maple Leaf Milling Co. Toronto, Canada.	G. 16.00 F. 17.60	5.50 5.59	48.00 60.55	..... 4.35	..... 11.91	10.00	Ground screenings not exceeding mill run.
Rex Wheat Middlings Maple Leaf Milling Co. Toronto, Canada.	G. 16.00 F. 16.46	5.50 5.50	48.00 61.98	..... 4.49	..... 11.57	10.00	Screenings not exceeding mill run.

Wheat Bran	G.	13.80	3.40	64.00	.....	.....	12.30	Ground screenings not exceeding mill run.
Marshall Milling Co.	F.	14.49	4.42	65.21	6.74	9.14	.....	
Marshall, Minn.								
Albertlea Standard Middlings	G.	15.00	4.50	.....	.....	.....	10.00	Wheat standard middlings with ground screenings
The Mills of Albertlea	F.	15.32	4.50	63.66	5.70	10.82	.....	not exceeding mill run.
Minneapolis, Minn.								
Wheat Bran	G.	13.00	4.00	50.00	.....	.....	15.00	Ground screenings not exceeding mill run.
Ogilivie Flour Mills Co.	F.	14.91	5.34	64.37	5.61	9.77	.....	
Winnipeg, Canada.								
Ofmco Wheat Middlings	G.	15.00	3.50	52.00	.....	.....	8.00	Mill run of wheat shorts and ground wheat screen-
Omaha Flour Mills Co.	F.	16.90	4.10	64.34	4.42	10.24	.....	ings not exceeding 8%.
Omaha, Nebr.								
Omar Pure Wheat Bran	G.	14.50	3.50	50.00	.....	.....	11.00	Pure wheat bran.
Omaha Flour Mills Co.	F.	15.67	4.15	63.38	6.84	9.96	.....	
Omaha, Nebr.								
"Omar" Pure Wheat, White Shorts or Red Dog	G.	14.00	2.50	57.00	.....	.....	6.00	Pure wheat, white shorts or red dog.
Omaha Flour Mills Co.	F.	16.75	3.76	64.77	3.17	11.55	.....	
Omaha, Nebr.								
Omar Wheat Shorts	G.	15.00	3.50	52.00	.....	.....	8.00	Omar wheat shorts and ground wheat screenings
Omaha Flour Mills Co.	F.	16.81	4.33	63.34	4.80	10.72	.....	not exceeding 8%.
Omaha, Nebr.								
Osota Feed	G.	15.00	4.50	.....	.....	.....	10.00	Wheat bran and middlings with ground screenings
National Milling Co.	F.	17.08	5.43	60.73	5.25	11.51	.....	not exceeding mill run.
Toledo, Ohio.								
Choice Wheat Middlings	G.	14.00	4.00	.....	.....	.....	11.00	
Niagara Falls Milling Co.	F.	18.27	5.47	59.81	3.98	12.47	.....	
Niagara Falls, N. Y.								
Planet Feed	G.	15.00	4.00	55.00	.....	.....	8.00	No screenings, no scourings, a mixture of wheat
Northwestern Consolidated Milling Co.	F.	20.37	5.29	58.94	4.61	10.79	.....	bran, and red dog.
Minneapolis, Minn.								
Pure Wheat Bran	G.	13.00	4.00	50.00	.....	.....	13.00	No screenings, no scourings.
Northwestern Consolidated Milling Co.	F.	14.56	4.69	63.37	7.00	10.38	.....	
Minneapolis, Minn.								

Brand and name and address of manufacturer	Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
	Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Pure Wheat Bran	G. 14.50	4.00	50.00	.....	.....	11.00	Pure wheat bran, no screenings, no scourings.
Northwestern Consolidated Milling Co. Minneapolis, Minn.	F. 14.98	4.59	64.13	6.67	9.63	.....	
Wheat Flour Middlings	G. 15.00	4.00	57.00	.....	.....	8.00	Ground screenings not exceeding mill run.
Northwestern Consolidated Milling Co. Minneapolis, Minn.	F. 14.98	4.59	64.13	6.67	9.63	.....	
XXX Comet	G. 16.00	4.00	60.00	.....	.....	4.00	Pure wheat product composed of red dog wheat flour.
Northwestern Consolidated Milling Co. Minneapolis, Minn.	F. 17.30	4.17	64.47	2.87	11.19	.....	
Wheat Bran Feed	G. 15.00	4.75	.....	.....	.....	11.00	Ground screenings not exceeding mill run.
Northwest Mills Montreal, Canada.	F. 16.90	5.69	60.35	5.88	11.18	.....	
Champion Mixed Feed	G. 13.56	3.58	.....	.....	.....	8.47	Ground screenings not exceeding mill run.
Portland Milling Co. Portland, Mich.	F. 14.71	3.91	65.45	5.10	10.83	.....	
Fancy Mixed Feed	G. 14.00	4.00	53.00	.....	.....	10.00	Wheat bran and wheat red dog flour with ground screenings not exceeding mill run.
Pillsbury Flour Mills Co. Minneapolis, Minn.	F. 15.21	4.74	65.76	4.50	9.79	.....	
Pillsbury's Durum Wheat Bran	G. 11.00	4.00	53.00	.....	.....	14.00	Ground screenings not exceeding mill run.
Pillsbury Flour Mills Co. Minneapolis, Minn.	F. 12.99	4.32	67.38	5.05	10.26	.....	
Pillsbury's Wheat A Middlings	G. 15.00	4.00	55.00	.....	.....	8.00	Standard B middlings and low grade flour with ground screenings not exceeding mill run.
Pillsbury Flour Mills Co. Minneapolis, Minn.	F. 17.22	4.00	63.34	3.86	11.58	.....	
Pillsbury's Wheat Bran	G. 13.00	4.00	50.00	.....	.....	13.00	Ground screenings not exceeding mill run.
Pillsbury Flour Mills Co. Minneapolis, Minn.	F. 15.41	5.36	64.34	5.91	8.98	.....	

Pillsbury's Standard B Middlings	G.	14.00	4.00	52.00	.....	.....	11.00	Ground screenings not exceeding mill run.
Pillsbury Flour Mills Co. Minneapolis, Minn.	F.	16.90	5.22	62.01	5.10	10.77	.....	
Pillsbury's XX Daisy	G.	16.00	4.00	60.00	.....	.....	4.00	Pure wheat product.
Pillsbury Flour Mills Co. Minneapolis, Minn.	F.	19.18	4.00	63.96	2.76	10.10	.....	
Bell Cow Bran	G.	15.30	5.50	50.00	.....	.....	7.60	Ground screenings not exceeding mill run.
Quaker Oats Co. Chicago, Ill.	F.	16.55	5.79	61.45	5.82	10.39	.....	
Buckeye Mixed Feed	G.	15.50	4.50	63.00	.....	.....	8.50	Wheat mixed feed with ground screenings not exceeding mill run.
Quaker Oats Co. Chicago, Ill.	F.	16.15	4.58	63.15	5.84	10.28	.....	
Richardton Mixed Feed	G.	16.70	3.70	.....	.....	.....	9.20	Pure wheat bran, middlings shorts and wheat screenings not exceeding mill run.
Richardton Milling Co. Richardton, N. Dak.	F.	16.72	5.44	61.89	5.04	10.91	.....	
Wheat Shorts	G.	15.50	5.00	.....	.....	.....	12.00	Ground screenings not exceeding mill run.
Robin Hood Mills Moose Jaw, Canada	F.	19.11	5.16	58.95	5.25	11.53	.....	
Royal Wheat Bran	G.	15.00	3.00	60.00	7.00	.....	10.00	Ground screenings not exceeding mill run.
Royal Milling Co. Great Falls, Mont.	F.	18.21	5.11	60.69	5.87	10.12	.....	
Alta Pure Wheat Middlings	G.	15.00	4.50	55.00	.....	.....	8.50	Mill run of standard middlings and flour middlings mixed.
Russell-Miller Milling Co. Minneapolis, Minn.	F.	18.30	5.90	60.19	4.52	11.09	.....	
Bran	G.	13.00	4.00	.....	.....	.....	11.00	Made from wheat only.
Russell-Miller Milling Co. Minneapolis, Minn.	F.	17.34	5.40	59.90	6.02	11.34	.....	
Wheat Occident Feed	G.	15.00	4.50	54.00	.....	.....	10.00	Mill run of bran, middlings and red dog.
Russell-Miller Milling Co. Minneapolis, Minn.	F.	17.08	5.66	62.47	3.96	10.83	.....	
Kay A Red Dog	G.	16.00	4.00	60.00	.....	.....	4.00	Pure wheat products composed of red dog wheat flour.
Sands, Taylor & Wood Co. Boston, Mass.	F.	17.90	5.19	62.91	2.75	11.25	.....	

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Red Dog Flour	G.	16.50	4.00	58.00	.....	.....	4.50	
Shane Bros & Wilson Co.	F.	19.67	5.21	59.94	3.39	11.79	.....	
Minneapolis, Minn.								
Snow Ball Middlings	G.	16.00	4.00	55.00	.....	.....	9.00	Wheat flour middlings with ground wheat screenings not exceeding mill run.
Shane Bros & Wilson Co.	F.	16.08	5.37	63.17	4.32	11.06	.....	
Minneapolis, Minn.								
Gold Mine Feed	G.	15.00	4.50	.....	.....	.....	9.90	Bran, shorts, low grade flour, wheat products and pulverized screenings.
Sheffield-King Milling Co.	F.	16.02	4.50	63.26	5.38	10.84	.....	
Minneapolis, Minn.								
Wheat Bran and Screenings	G.	13.50	3.20	.....	.....	.....	13.40	Wheat bran and wheat screenings not exceeding mill run.
Sleepy Eye Mills	F.	14.42	4.19	64.47	6.06	10.86	.....	
Sleepy Eye, Minn.								
Red Turkey Pure Wheat Bran	G.	14.50	4.00	49.00	.....	.....	11.80	
Southwestern Milling Co.	F.	16.26	4.20	61.44	6.39	11.71	.....	
Kansas City, Kan.								
Try-Me Mixed Feed	G.	16.00	3.50	.....	.....	.....	9.00	Pure wheat bran, middlings and ground screenings not exceeding mill run.
Sparks Milling Co.	F.	16.84	3.71	63.12	5.57	10.76	.....	
Alton, Ill.								
Wirthmore Middlings	G.	14.00	4.00	50.00	.....	.....	8.00	Wheat middlings and red dog flour. Less than mill run of screenings.
St. Albans Grain Co.	F.	14.57	3.48	66.69	4.23	11.03	.....	
St. Albans, Vt.								
Wirthmore Wheat Feed	G.	15.00	4.50	50.00	.....	.....	8.00	With less than mill run of screenings. Wheat bran and red dog flour.
St. Albans Grain Co.	F.	18.08	4.50	61.39	4.24	11.79	.....	
St. Albans, Vt.								
Bran	G.	14.00	3.00	45.00	.....	.....	10.00	Pure wheat with mill run of screenings.
F. W. Stock & Sons	F.	15.58	3.74	63.87	6.75	10.06	.....	
Hillsdale, Mich.								

Middlings	G.	16.00	4.00	50.00	.....	.....	6.00	Soft winter wheat.
F. W. Stock & Sons	F.	16.16	4.40	63.98	4.23	11.23	.....	
Hillsdale, Mich.								
Monach Fancy Wheat Feed	G.	15.00	4.00	50.00	.....	.....	10.00	Mill run of screenings.
F. W. Stock & Sons	F.	17.25	4.00	61.66	5.23	11.36	.....	
Hillsdale, Mich.								
Stock's Superior	G.	16.00	4.00	60.00	.....	.....	6.00	Wheat feed and mill run of screenings.
F. W. Stock & Sons	F.	16.90	4.08	63.33	4.40	11.29	.....	
Hillsdale, Mich.								
Pennant Middlings	G.	15.00	4.00	57.00	.....	.....	9.00	Brown wheat middlings with ground screenings not
David Stott Flour Mills, Inc.	F.	16.08	4.61	63.37	3.77	12.17	.....	exceeding mill run.
Detroit, Mich.								
Stott's Fine White Middlings	G.	15.50	4.00	60.00	.....	.....	8.50	Fine white middlings.
David Stott Flour Mills, Inc.	F.	15.82	4.00	64.48	2.78	12.92	.....	
Detroit, Mich.								
Stratton & Co's Middlings	G.	16.20	4.26	.....	.....	.....	6.50	Screenings not exceeding mill run.
Stratton & Co.	F.	15.24	4.26	65.43	3.39	11.68	.....	
Concord, N. H.								
Stratton & Co's Mixed Feed	G.	15.29	4.30	63.00	.....	.....	7.93	Screenings not exceeding mill run.
Stratton & Co.	F.	15.38	3.94	64.96	4.99	10.73	.....	
Concord, N. H.								
T&C Wheat Mixed Feed	G.	14.00	4.50	50.00	.....	.....	11.00	Wheat bran, and middlings with ground screenings
Thornton & Chester Milling Co.	F.	17.12	5.39	60.84	4.82	11.83	.....	not exceeding mill run.
Buffalo, N. Y.								
Rowena Wheat Cow Feed	G.	15.00	4.00	.....	.....	.....	8.50	Ground screenings not exceeding mill run.
Valley City Milling Co.	F.	14.63	4.01	66.23	4.75	10.38	.....	
Grand Rapids, Mich.								
Rowena Wheat Middlings	G.	15.00	4.00	.....	.....	.....	8.00	Ground screenings not exceeding mill run.
Valley City Milling Co.	F.	15.35	4.00	64.78	5.00	10.87	.....	
Grand Rapids, Mich.								
Victor Bran	G.	14.60	4.00	51.00	.....	.....	15.00	Ground screenings not exceeding mill run.
Victor Milling Co.	F.	16.74	5.67	61.31	5.01	11.27	.....	
Victor, N. Y.								

Brand and name and address of manufacturer		Pounds in 100 lbs. of Feed Stuff						Certified by manufacturer to contain.
		Protein	Fat	Carbo-hydrates	Ash	Moist-ure	Crude Fiber.	
Victor Middlings	G.	17.50	5.00	48.00	.....	.....	10.00	Ground screenings not exceeding mill run.
Victor Milling Co.	F.	17.60	5.64	61.97	4.11	10.68	.....	
Victor, N. Y.								
Voigts Middlings	G.	14.50	4.00	55.20	.....	.....	10.00	Winter wheat middlings with ground screenings not exceeding mill run.
Voight Milling Co.	F.	15.06	4.54	65.49	4.17	10.74	.....	
Grand Rapids, Mich.								
Arlington Flour	G.	14.00	4.00	60.00	.....	.....	4.00	Selected wheat.
Washburn Flour Mills	F.	20.20	4.00	62.55	1.52	11.73	.....	
Minneapolis, Minn.								
Flour Middlings	G.	15.00	4.00	55.00	.....	.....	8.00	Wheat flour middlings with ground screenings not exceeding mill run.
Washburn Flour Mills	F.	17.34	4.00	63.37	3.34	11.95	.....	
Minneapolis, Minn.								
Washburn-Crosby Co's Mixed Feed	G.	14.00	4.00	53.00	.....	.....	10.00	Wheat mixed feed with ground screenings not exceeding mill run.
Washburn Flour Mills	F.	17.10	4.67	62.52	4.45	11.26	.....	
Minneapolis, Minn.								
Adrian Red Dog Flour	G.	16.00	4.00	60.00	.....	.....	4.00	Pure hard wheat.
Washburn Mills	F.	17.16	4.00	64.99	3.21	10.64	.....	
Minneapolis, Minn.								
Standard Middlings	G.	14.00	4.00	52.00	.....	.....	11.00	Ground screenings not exceeding mill run.
Washburn Mills	F.	16.46	5.24	63.11	4.79	10.40	.....	
Minneapolis, Minn.								
Washburn-Crosby Co's Durum Red Dog	G.	16.00	4.00	60.00	.....	.....	4.00	
Washburn Mills	F.	17.60	5.96	62.30	3.69	10.45	.....	
Minneapolis, Minn.								
Washburn-Crosby Co's Durum Wheat Bran	G.	12.00	4.00	50.00	.....	.....	16.00	Ground screenings not exceeding mill run.
Washburn Mills	F.	14.80	5.17	64.65	5.21	10.17	.....	
Minneapolis, Minn.								

Wheat Bran	G.	13.00	4.00	50.00	.....	.....	13.00	Ground screenings not exceeding mill run.
Washburn Mills	F.	14.63	4.71	63.98	6.50	10.18		
Minneapolis, Minn.								
Spring Wheat Bran	G.	14.50	4.00	.....	.....	.....	11.00	Ground screenings not exceeding mill run.
Western Canada Flour Mills Co.	F.	15.03	4.86	63.71	5.59	10.31		
Winnipeg, Canada.								
Kent Mixed Feed	G.	17.00	5.00	.....	.....	.....	11.00	Winter wheat.
Williams Bros. Co.	F.	16.00	4.44	63.36	5.12	11.03		
Kent, Ohio.								